

# **Energy Codes and Energy Code Enforcement in Iowa**



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# State Energy Code

- Adopted by the Building Code Commissioner as part of the State Building Code.
- Included in the administrative rules of the Department of Public Safety.
- 661 Iowa Administrative Code Chapter 303.

# State Energy Code

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- Adopts by reference: International Energy Efficiency Code (IECC), 2006 edition, published by the International Code Council (ICC).

# Energy Codes in Iowa: Statutory Basis

- Iowa Code section 103A.7, subsection 6:  
Requires energy conservation standards for construction be included in State Building Code, applicable to buildings “intended for human occupancy and use.”
- Iowa Code section 103A.8 subsection 7:
  - Limits application to new construction of buildings which are heated or cooled.
  - Requires exemptions “if the commissioner determines that the standards are unreasonable as they apply to a particular building or class of buildings...”

# Energy Codes in Iowa: Statutory Basis

(continued)

- **Iowa Code section 103A.8A:**
  - Applies energy code to residential construction
  - Requires energy code to be “based upon” a national standard or code.
- **Iowa Code section 103A.10 applies the state energy code to:**
  - Buildings owned by the state or a political subdivision.
  - Buildings being constructed in political subdivision which have adopted local building codes.
  - All other construction of more than 100,000 cubic feet which is heated or cooled.

# Energy Codes in Iowa: Statutory Basis

(continued)

- **State Energy Code also applies to any other new construction which is subject to the State Building Code.**

**NOTE: Lighting efficiency standards apply to construction of any other building open to the general public.**

# To what does the State Energy Code apply?

## Defining New Construction

- "New construction," includes
  - Original construction
  - Additions to existing structures
  - Reconstruction of existing structures
  - Conversion of existing structure
- "New construction" does not include:
  - Renovation of existing structures
  - Remodeling of existing structures

# To what does the State Energy Code apply?

Iowa Code section 103A.10, subsection 4, paragraph a

- New construction of buildings and facilities owned by the State.
- New construction of buildings and facilities financed in whole or in part with moneys appropriated by the State, if there is no local building code or the local building code is not enforced.
- New construction of any publicly-owned building or facility.
- New construction of any other building or facility if there is a local building code.
- New construction of any other building or facility of more than 100,000 cubic feet of enclosed space that is heated or cooled.
- New construction of any other building or facility which is subject to the State Building Code.



# Local Adoption of Energy Codes

- Political subdivisions may adopt minimum energy standards, in lieu of the State Energy Code.
- These standards must be “substantially in accordance with model energy codes and standards developed by a nationally recognized organization” and must be kept up to date with updates or revisions to those model codes or standards.
- Iowa Code sections 103A.8A and 103A.10, subsection 5.

# Where does the State Energy Code not apply?

**No energy code applies to the following new construction:**

- **Construction which is privately owned and financed, provided that it is:**
  - Less than 100,000 cubic feet of enclosed space, or is more than 100,000 cubic feet of enclosed space, which is not heated or cooled , and is
  - Located in a jurisdiction with no local building code.

# **Energy Conservation in Construction: Additional Tools in the Iowa Code**

- **Energy Reviews:** Required for any building over 100,000 cu. ft of conditioned space. Conducted by Architect or Engineer to certify compliance with the energy code. Iowa Code 103A.19(6).
- **Life Cycle Cost Analysis:** Public Facilities over 20,000 square feet that is heated or cooled ; Optimize Energy Management over the Life Cycle of the Building. Iowa Code 470.

# Energy Code Enforcement

- Construction subject to the State Building Code: Enforcement by State Building Code Bureau;
- Construction subject to local building code: Enforcement by local building department, if there is one;
- Construction not subject to the State Building Code where there is no local building code or no local building department: No enforcement.

# Energy Code Enforcement

(continued)

- A significant portion of new construction is not subject to an energy code.
- Data is sparse, but it appears that energy code enforcement in Iowa is inconsistent.
- Training of code enforcement officials and resources available for enforcement are areas which building code officials mentioned as challenges in a 2004 study sponsored by the Department of Natural Resources.

# Policy Options to Consider

- Apply State Energy Code to all new construction in the state.
- Provide training opportunities for code officials in energy code enforcement.
- Provide resources for local enforcement (plan reviews and inspections).
- Extend State Building Code inspections to all new construction covered by the State Energy Code (additions are not currently inspected).
- Require and/or provide incentives for enhanced energy conservation features exceeding requirements of IECC.

# Sustainable Design

If sustainable design standards are adopted as requirements for certain construction or as a basis for incentives:

- Requiring that specific energy conservation goals of significant energy savings beyond what is realized through compliance with the International Energy Conservation Code should be incorporated into sustainable design standards.
- Adoption of specific standards should be by administrative rule, rather than writing a specific standard into a statute, to allow the State to respond to rapid changes occurring in sustainable design standards.
- Flexibility should be provided to regulatory agencies to work through administrative issues; notably, that certification as a "green building" does not occur until after construction is complete.



# Contact Information



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